

STATE OF SOUTH CAROLINA
BEFORE THE PUBLIC SERVICE COMMISSION

Docket No.: 2020-229-E

Dominion Energy South Carolina,
Incorporated's Establishment of a Solar Choice
Metering Tariff Pursuant to S.C. Code Ann.
Section 58-40-20 (See Docket No. 2019-182-E)

**TESTIMONY OF ALDER ENERGY
SYSTEMS, LLC AND EXHIBITS**

Intervenor Alder Energy Systems, LLC offers the testimony of its witness and Chief Executive Officer, **Donald R. Zimmerman**, MS, MBA, NABCEP, and exhibits thereto, as follows.

1 **Q: SUMMARIZE YOUR TESTIMONY.**

2 A: My name is Donald R. Zimmerman. I am the principal and founder of Alder Energy
3 Systems, LLC, a solar developer and EPC contractor based out of Charleston, South Carolina.
4 The company focuses on providing customer-sited, distributed generation solar solutions
5 (“DG” or “customer-generat[]”)¹ to commercial and industrial ratepayers (“C&I”), including
6 those in the service territory of Dominion Energy South Carolina, Incorporated (“DESC”).

7 The tariffs proposed by DESC in the instant docket will end C&I DG. DESC’s
8 proposal in the instant proceeding would be so disastrous, that only one conclusion can be
9 drawn: DESC intends on punishing businesses that want to generate their own electricity. The
10 proposed subscription fee, alone, would be enough to ensure no additional, future investment
11 in C&I customer-generation. DESC nails the coffin in by shortening the netting period by
12 (99.98)-percent. The drastically reduced netting period effectively ends net metering in DESC
13 territory, entirely, and renders DG financially infeasible for C&I ratepayers.

14 DESC’s proposed tariffs are industry-killing and do not comply with the Energy
15 Freedom Act (“A62”). The Commission should find that DESC’s refusal to seek industry or
16 customer comment on the proposed tariffs is DESC’s acknowledgement that the utility seeks
17 to overhaul DG in its service territory and end net metering. The Commission should further
18 reject the tariffs and require DESC to apply for rate changes before the Commission or,
19 alternatively, adopt Alder Energy’s various proposals herein.

¹ To the extent, “DG” and “customer-generat[]” is used in this filing, it refers to photovoltaic solar distributed generation/customer-generation, exclusively.

1 **Q: WHO ARE YOU AND WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

2 A: I founded Alder Energy Systems, LLC during 2008 and am President / CEO of that
3 organization. The company's address is 495 Jessen Lane, Charleston, SC 29492. Alder is a
4 photovoltaic ("PV") solar developer and installer based out of Charleston, South Carolina. The
5 company focuses on the design and installation of DG systems for C&I customers. Alder has
6 completed over five hundred DG projects in the southeastern United States and mid-Atlantic,
7 ranging in capacity size from 2kW to 8MW. Alder developed and performed the engineering,
8 procurement, and construction ("EPC") for South Carolina's first-ever solar farm, located in
9 Colleton County.² The company also performed EPC for the 8MW DG system adjacent to the
10 Volvo plant located in Ridgeville, Berkley County, South Carolina.

11 The purpose of my testimony is to assist the Public Service Commission of South
12 Carolina (the "Commission") in establishing successor net energy metering ("NEM") and DG
13 policies for C&I ratepayers in DESC's service territory that comply with A62.

14 **Q: WHAT IS YOUR BACKGROUND?**

15 A: I am an electrical engineer by trade, having earned:

- 16 a) Bachelor of Science degree in electrical engineering from University of Michigan
17 (1983),
- 18 b) Master of Science degree in Optics from the University of Rochester (1986), and
- 19 c) Master of Business Administration from Columbia University (2005).

20
21 I have worked in the field of photonics for nearly three decades; hold seven patents;
22
23 and have earned a Solar PV Installation Professional certification from the North American
24 Board of Energy Practitioners (NABCEP) (2009). NABCEP certification is the most difficult
25 professional certification to achieve for EPC solar contractors and requires intense rigor
26

² Alder was not the exclusive developer of the Colleton County project.

1 including requirements for: education, professional tenure, demonstrated projects, testing, and
2 continuing education.

3 I have contributed to solar policy in South Carolina since participating in the initial
4 negotiations and stakeholder meetings leading to passage of the ‘Distributed Energy Resources
5 Program Act’ (“A236”). Alder Energy is a member of the South Carolina Solar Council, Solar
6 Energy Industries Association, and the Coalition for Community Solar Access.³ The company
7 has maintained an active delegate in these organizations since 2011, 2016 and 2018,
8 respectively, and participated in stakeholder meetings leading to the passage of A62.

9 I humbly offer my expertise to the Commission individually as an engineer, and in my
10 capacity as President and founder of Alder Energy. I am not formally trained on utility rate
11 design, but have a thorough understanding of South Carolina DG and NEM policies and their
12 implementation.

13 **Q: HAS ALDER ENERGY EVER INTERVENED IN A PROCEEDING BEFORE THE**
14 **COMMISSION?**

15 A: Yes. In addition to the instant proceeding, Alder Energy intervened in electric docket
16 2019-182-E, commonly and hereinafter referred to as the “Generic Docket,” and the sister
17 ‘solar choice metering tariff’ proceedings of DEC and DEP.⁴ Alder Energy has not intervened
18 in any Commission proceeding predating passage of A62 and unrelated to NEM policies.

³ Alder Energy was previously a member of the South Carolina Solar Business Alliance (“SCSBA”) from 2012 to 2020.

⁴ Alder Energy also intervened in the predecessor dockets to DEC and DEP’s ‘solar choice metering tariff’ proceedings that were subsumed into the instant docket. Alder did not offer testimony or other substance in those proceedings.

1 **Q: HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?**

2 A: Yes. I offered pre-filed direct and rebuttal testimony and trial testimony in the Generic
3 Docket.⁵ The purpose of the Generic Docket was to establish a methodology for determining
4 the value of customer-generated solar in the service territories of utilities Duke Energy
5 Carolinas, LLC (“DEC”), Duke Energy Progress, LLC (“DEP”) and DESC.

6 **Q: WHAT DID YOU DO TO PREPARE FOR YOUR TESTIMONY?**

7 A: I consulted with Alder Energy’s counsel; reviewed company data; consulted with
8 company executives; and reviewed the direct testimony filed by DESC in this proceeding. I
9 also reviewed NEM pricing memorandums published by solar trade organizations.

10 **Q: WHY DID ALDER ENERGY INTERVENE IN THIS PROCEEDING?**

11 A: The South Carolina General Assembly passed A62 to ensure ratepayer access to solar
12 energy in South Carolina. S.C. CODE ANN. § 58-41-40(A). The law requires the Commission
13 to approve a ‘solar choice metering tariff’ for DESC, to succeed NEM policies approved by
14 the Commission under A236. *See* S.C. CODE ANN. § 58-40-20(F). The law prohibits any
15 policy that penalizes customer-generators for participating in DG. *See* S.C. CODE ANN. § 58-
16 40-20(G)(2). In establishing DESC’s ‘solar choice metering tariff,’ the Commission should
17 consider:

- 18 a) continuing private investment in “onsite” DG;
19 b) reducing regulatory and administrative burdens on the deployment of DG; and
20 c) avoiding disruption of “customer-scale” DG.

21 *See* S.C. CODE ANN. § 58-40-20(A).

⁵ I served on the board of SCSBA from 2016 to 2018. SCSBA intervened and offered testimony during my tenure with the organization.

1 The law makes no distinction between NEM policies for residential and nonresidential
2 customers and requires the Commission to establish a ‘solar choice metering tariff’ without
3 qualification or exclusion based on rate-class (ie, for both residential and nonresidential
4 customers).

5 Alder Energy intervened in this proceeding to protect the right of C&I customers to
6 access solar solutions in DESC territory, as provided by A62. My testimony is intended to
7 support that end by providing the Commission with data and perspectives arising from C&I
8 customer-generators in South Carolina and in DESC service territory, specifically. No other
9 intervenor in this proceeding will exclusively represent C&I customer-generators in DESC
10 service territory.

11 **Q: WHAT DRIVES THE ADOPTION OF BEHIND-THE-METER SOLAR BY**
12 **NONRESIDENTIAL CUSTOMERS IN SOUTH CAROLINA?**

13 A: Alder Energy began installing behind-the-meter solar installations (“BTM” or “behind-
14 the-meter,” as appropriate) for residential customers prior to passage of A236. Alder matured
15 its market position and is currently one of (if not the) leading DG solar EPC contractor for
16 nonresidential customers in South Carolina. Nearly all of Alder’s current customers are C&I
17 ratepayers investing in DG, with an average nameplate capacity system size of 124kW DC in
18 South Carolina alone.⁶ Alder has completed approximately (80) behind-the-meter projects for
19 nonresidential customers, the large majority of which are located in South Carolina.

20 Alder’s experience shows financial considerations and corporate sustainability drive
21 nonresidential investment in DG. The initial investment interest in DG typically originates
22 from a desire to offset a business’s energy usage and/or comply with corporate directives for

⁶ This figure includes data from projects in DEC, DEP, DESC, Santee Cooper, and City of Rock Hill utility territories.

1 sustainability. Purely financial considerations then control the ultimate investment decision.
2 The leading variable in the investment decision has traditionally been a project's projected
3 payback period. This measure identifies the first year that a solar project's generation revenue
4 covers upfront capital costs. I address these drivers in more detail below.

5 **A. Investment Interest**

6 *1. Offsetting Energy Usage*

7 C&I customers invest in DG to offset their energy usage. An energy offset occurs
8 when a business replaces a kilowatt hour ("kWh," where appropriate) purchased from a utility
9 with a kWh generated behind-the-meter. The customer-generated kWh is consumed onsite or,
10 in the event of a surplus, delivered to the distribution network in exchange for an energy credit.
11 NEM policies allow businesses to aggregate energy credits over time—throughout identified
12 netting periods. In that way, customer-generators accumulate energy credits when surplus
13 generation is available and then allocate them across periods of time when a PV system is
14 inactive (e.g., at night) or otherwise inefficient.

15 Longer netting periods allow more energy credits to accumulate. Annual-netting, for
16 example, allows customer-generators to accumulate and allocate energy credits across, not only
17 the diurnal cycle, but across seasonal variability when the angle of solar radiation or persistent
18 foul weather may create inefficiencies in PV generation. Energy credits offset grid-provided
19 energy costs during netting. Excess energy credits after netting are compensated at the value
20 of solar rate. Customer-generation translates into bill savings for the customer and,
21 importantly—from a utility-cost perspective—has no perceptible difference from energy
22 efficiency improvements, load reductions, or demand-side-management. DEC and DEP agree
23 with this position. *See generally* Generic Docket Tr. 355.11 (discussing emergency efficiency
24 and demand-side-management).

1 Larger systems sizes also generate more energy, but the netting period acts as an upper
2 limit on the cost-effectiveness of the system. Nonresidential customer-generators are not
3 incentivized to oversize. A shorter netting period will inherently discourage larger investments
4 in DG systems, despite the business community's growing interest in increasing their use of
5 renewable energy. Historically, this sweet spot for C&I solar in South Carolina is far below
6 the one-megawatt limit codified by law and often well-below what the customer's real estate
7 or rooftop space allows. In that way, C&I NEM is by no means a free-for-all.

8 The current netting period credited by DEP, DEC and DESC is one year. South
9 Carolina customer-generators are therefore able to aggregate offsets over a full year. This
10 annual generation is subject to 1:1 bill credit under current NEM programs approved by the
11 Commission.

12 2. Corporate Sustainability

13 Over (280) companies, globally, have made commitments to source one-hundred
14 percent renewable energy.⁷ The Environmental Protection Agency's 'Green Power
15 Partnership' program maintains over (1,400) business, which collectively use 61,000 gigawatt
16 hours of 'green power,' annually.⁸ Many of these businesses have operations in South Carolina
17 and some within DESC's service territory. Additionally, it is well-published that DEP, DEC
18 and DESC intend to be one-hundred percent carbon free by 2050.

19 Businesses can achieve corporate sustainability goals through purchasing or generating
20 renewable energy certificates ("REC(s)"). A REC is a market-based instrument that represents
21 the property rights to the environmental, social, and other non-power attributes of renewable

⁷ Nonprofit corporation Climate Group formed 'RE100,' which organizes and promotes corporate one-hundred percent renewable energy targets. The program has over (280) members at the time of this writing. <https://www.there100.org/>

⁸ <https://www.epa.gov/greenpower/green-power-partner-list>

1 electricity generation.⁹ RECs are purchased or generated by a business through DG and may
2 be claimed towards renewable energy targets.

3 Corporate sustainability initiatives create significant demand for DG nationally and
4 drive deployment of BTM solar for South Carolina C&I customers. NEM policies can limit
5 the ability of corporations to achieve their sustainability goals by making them financially
6 infeasible, notwithstanding an abundant supply of otherwise willing participants.

7 **B. Investment Decision: ROI and Payback Period**

8 C&I solar customers are like any other business enterprise—driven to achieve the
9 shortest time horizon for the highest return on investment (“ROI”). The most important
10 consideration for C&I customers considering BTM solar, financial or otherwise, is payback
11 period. This measure identifies the first year during which a solar project is generating a
12 positive ROI. BTM solar, like many capital improvements, requires years to recoup significant
13 upfront costs. The payback period models when a project’s generation revenue covers these
14 upfront costs, among other expenses. No matter how strong a C&I customers’ need is to lower
15 operating costs through energy offsets or to achieve sustainability goals, the ultimate decision
16 traditionally rests with an analysis of the payback period.

17 In over a decade of installing BTM solar in South Carolina, I have not encountered a
18 nonresidential customer that would agree to participate in DG without the existence and
19 implementation of policies creating a financial return within eight years. Eight years sets the
20 upper limit of an acceptable payback period; C&I customers prefer a range of four to seven
21 years.¹⁰ Achieving this range of payback period in South Carolina has historically required a
22 bill credit for surplus generation equal to the same rate the utility charges the customer for

⁹ <https://www.epa.gov/greenpower/renewable-energy-certificates-recs>

¹⁰ Alder took the same position in the Generic Docket.

1 energy use. This methodology for compensating ratepayers with customer-sited DG is called
 2 “one-to-one net metering” or “retail net metering” because the bill credit represents a one-to-
 3 one (“1:1”) ratio of the customer’s retail bill rate to credit.

4 A secondary concern to would-be C&I customer-generators is the lifetime payback
 5 from a proposed project, traditionally measured by ROI. The many variables that effect a PV
 6 system’s generation capacity also effect a project’s ROI. Suffice it to say, the greater the ROI,
 7 the more likely an investment commitment occurs by the customer.

8 The Commission’s decision in this proceeding has the potential to elongate the payback
 9 period and reduce a system’s ROI and thereby disrupt or even damage the DG market in DESC
 10 territory. Both results are prohibited by A62. Merely maintaining the existing scale of DG
 11 deployment for C&I customers in DESC territory will depend heavily on the Commission
 12 approving policies that do not extend the payback period. Expanding the existing scale of DG
 13 deployment for C&I in DESC territory will be highly unlikely without the Commission’s
 14 approval of continued 1:1 bill credits for nonresidential customers that allow annual
 15 accumulation of energy credits.¹¹

16 **Q: DID DESC SEEK ALDER ENERGY’S INPUT AT ANY TIME PRIOR TO OR SINCE**
 17 **PROPOSING ITS TARIFFS?**

18 A: No, nor did DESC conduct stakeholder meetings, as admitted by DESC witness Kassis.
 19 (Kassis Tr. (Direct) 8:6-17) (matter # 296029). It is difficult to avoid the conclusion DESC
 20 did not want to manage the backlash that would have resulted from disclosing its intent to
 21 pursue the market-killing tariffs proposed in this proceeding.

¹¹ This conclusion derives from boots-on-the-ground experience with C&I customers considering investing in DG. Neither myself, nor Alder, conducted or caused an empirical study to be conducted.

1 **Q: DO THE TARIFFS PROPOSED BY DESC IMPACT THE C&I INVESTMENT**
 2 **DECISION IN BEHIND-THE-METER SOLAR?**

3 A: DESC's proposed tariffs are nearly certain to end future C&I investment in DG. The
 4 applicable C&I tariff, titled 'For Small General Service Customers,' is attached to DESC
 5 witness Rooks' pre-filed direct testimony as 'Exhibit No. [] AWR-2' (matter # 296029) (the
 6 "C&I Tariff" or "proposed tariff," where appropriate). The proposed tariff has the same
 7 market-killing features as its sister residential tariff. I address the tariff's impact on the
 8 investment analysis in detail below.

9 **A. Investment Interest**

10 **1. Offsetting Energy Usage**

11 DESC would have this Commission approve a tariff that shrinks the netting period
 12 nonresidential customers are accustomed to by a whopping (99.98)-percent—from one year to
 13 one hour. In this scenario, customer-generators will offset their energy usage only during the
 14 day, when the system is generating electricity. Nonresidential customers, including those in
 15 DESC territory, rely on annual aggregation to achieve the ROI required for investing in DG.
 16 The C&I Tariff will result in marginal or even negative ROI by dramatically reducing a
 17 business's ability to offset its energy bill over time.

18 Shrinking the netting period will also shrink system sizes. DESC's proposal for hourly-
 19 netting will hamstring the economic viability of larger PV systems, where the value of offsets
 20 cannot cover the significant upfront construction capital.

21 There is no support for hourly-netting in A62. The Commission should keep status
 22 quo and require DESC to revise the C&I Tariff to include annual-netting or otherwise provide
 23 a minimum of monthly-netting. By DESC's own projection, merely maintaining status quo
 24 (e.g., annual netting and no subscription fees) will result in abysmal market growth for
 25 nonresidential DG over the next ten years. See Kassis Tr. Ex. No. ____ (SR-1) pp. 18-29. Even

1 under the best conditions, according to DESC, DG will not grow more than 10 MW AC in the
2 small and medium commercial market sectors and even less for large, other commercial, and
3 industrial market sectors. *Id.* at 24-28. This level of growth amounts to a mere two-tenths of
4 a percent of the total DG installed capacity in DESC over the next ten years, according to
5 DESC's projections. The C&I Tariff simply does not allow for viable private investment in
6 DG going forward.

7 The Commission should note DEC and DEP's proposed 'solar choice metering
8 tariffs'—offered in electric dockets 2020-264-E and 2020-265-E—propose monthly-netting.
9 Presumably DEC and DEP acknowledge that hourly-netting will end DG in its territory.

10 2. Corporate Sustainability

11 The C&I Tariff does not address whether DESC or the customer-generator will own
12 RECs created from DG. Prior to A236, beginning in 2007, RECs were the property of the
13 customer and were purchased through the voluntary Palmetto Clean Energy Program (PaCE).
14 PaCE offered premium payments for customer-generation. DESC currently lays claim to the
15 RECs as compensation for the purported A236 NEM policy costs. However, the rightful
16 default ownership of RECs resides with the customer-generator, which is often a lessor of the
17 system. DESC does not make the capital investment in customer-generation and therefore
18 should not retain the environmental attributes of the system.

19 DG RECs have value to customer-generators needing to achieve corporate
20 sustainability goals or otherwise interested in stewarding the environment. For example, Alder
21 Energy achieved its goal to offset one-hundred percent of its energy use with carbon-free
22 renewable energy through installation of a rooftop PV system, under the Act 236 Net Metering
23 2.0 policy. However, Alder cannot claim the environmental attributes produced by the system
24 because DESC has claimed them as partial compensation for NEM program costs under A236.

1 The Commission should require DESC to revise the C&I Tariff to provide expressly
 2 for the customer-generators' ownership of the RECs attributable to their investment. If DESC
 3 desires to purchase RECs from its customer-generators, then they may provide an optional
 4 offering to do so, as the utility has done in its Virginia market. See Exhibit DRZ-1.

5 **B. Investment Decision: Impact of Subscription Fee**

6 The proposed monthly subscription fee, which has no relationship to the amount of
 7 energy produced by a customer generator, is enough of a deterrent to end all new C&I DG. If
 8 implemented, it will effectively destroy the ROI and payback period of any potential C&I PV
 9 system. The outrageous proposed price of \$6.50 per kW AC of system capacity translates to:

- 10 a) \$65 for a 10 kW customer,
- 11 b) \$650 for a 100 kW customer, and
- 12 c) \$6,500 for a 1 MW customer,

13 every month, regardless of whether rain, clouds, or short winter days inhibit generation.

14 DESC attempts to justify the calculation for this fee by including a compensation credit
 15 at the avoided cost rate for "self-generation." In this scenario, customer-generation is
 16 compensated at full retail value when consumed BTM because they do not purchase it from
 17 DESC. By way of the subscription fee, DESC then claws-back that full retail value, less the
 18 avoided cost value. This effectively reduces the compensation for consumed generation to the
 19 avoided cost rate and punishes the customer-generator, in direct contravention of S.C. CODE
 20 ANN. § 58-40-20 (G)(2).

21 This Commission should not permit DESC to claim a payment for an energy service it
 22 does not provide. Customer-generated energy consumed BTM is the same as turning off the
 23 lights, reducing energy loads, or incorporating energy efficiency measures. It never touches
 24 DESC's equipment or grid and therefore should be valued at the full retail rate. Non-solar

1 customers within the rate class are not penalized when they avoid using energy. On the other
2 hand, DESC prejudices customer-generators receiving service under the C&I Tariff. Anything
3 less than full retail credit for consumption of customer-generation, whether hidden in a
4 subscription fee or not, is discriminatory. LED implementors and HVAC improvements, by
5 way of example, do not suffer subscription fees. If the proposed tariff is approved, DESC may
6 next send residential customers a subscription fee for turning off their lights.

7 **Q: DO THE C&I TARIFF PROPOSED BY DESC IMPACT EXISTING**
8 **NONRESIDENTIAL CUSTOMER-GENERATORS?**

9 A: Yes; if it is the only proposed replacement option for their investments. To date, all of
10 Alder Energy's nonresidential customers that participate in NEM are Rate 9 customers (Small
11 Generation). Rate 9 is an all energy rate. These customers would be offered the C&I Tariff as
12 a replacement when their NEM program expires, after either 2025 (NEM 2.0) or 2029 (NEM
13 3.0).

14 Under the C&I Tariff, existing customer-generators will see a significant reduction of
15 their annual bill savings from solar, primarily due to the addition of a subscription fee and the
16 switch from annual to hourly netting. Customers-generators with high offset percentages and
17 export generation have a high likelihood of receiving negative solar savings from their systems,
18 due to the large proportion of generation paid at avoided cost, along with the high cost of
19 subscription fees.

20 Subscription fees may also cause current customer-generators' ROI to be underwater
21 during the winter months, when generation is low due to reduced daylight, but the fees remain
22 high, based on the system's fixed inverter sizes. In many cases, the most economical option
23 for customers may be to pursue an 'Offset Only' or 'Offset/Sell' rate that may provide no or
24 little value for exported energy but would not have the penal subscription fee. The proposed

1 C&I Tariff is not an acceptable default for existing C&I customer-generators. Ultimately, each
2 customer will be challenged to consider all options open to them, reviewing their hourly
3 generation history, their hourly consumption history, new TOU rates, and fees to assess the
4 least costly course.

5 **Q: DOES THE C&I TARIFF PROPOSED BY DESC COMPLY WITH A62?**

6 A: In my view the C&I Tariff so blatantly ignores A62's mandate for this Commission in
7 establishing a 'solar choice metering tariff' that DESC demonstrates intent to punish
8 businesses that wish to participate in DG, in direct contravention of S.C. CODE ANN. § 58-40-
9 20(G)(2). The 'subscription fee,' alone, makes it more expensive to participate in the C&I
10 Tariff than it would be to simply build a BTM PV system and give exported generation away
11 to DESC for free. DESC incredulously argues that a business's investment to lower its energy
12 usage creates costs for the utility, despite acknowledging in the Generic Docket that customer-
13 generation has value from a cost perspective. This Commission should find that the C&I Tariff
14 does not comply with A62.

15 **Q: DO YOU HAVE OTHER CRITICISMS OF THE C&I TARIFF PROPOSED BY DESC?**

16 **A. TOU Rates**

17 A: Moving nonresidential customer-generators (or those considering it) that have been on
18 an all energy rate, and become familiar with the concept of NEM and annual netting, to a TOU
19 rate with hourly netting adds immense complexity to PV system proposals. The calculations
20 required to estimate, with any degree of accuracy, the solar production overlaid upon the
21 customers hourly load history, will require greater understanding from both customers and PV
22 system sellers and designers.

23 Nonresidential customers must be able to acquire annual hourly load history, which
24 need be available as a downloadable .csv file on every customer's online account portal, as

1 well as easily available through customer service. Even with such data, calculating the ROI
2 for a proposal increases in complexity and increases the probability of inaccuracy. This may
3 result in ratepayer confusion and loss of confidence in solar as an option for ratepayers, an
4 outcome prohibited by A62.

5 Alder Energy strongly believes TOU rates with hourly netting should be rejected by
6 the Commission. Should the Commission approve the C&I Tariff, it is critical that it order
7 DESC to make hourly (8760) data available. Since that data is not currently available to
8 industry and/or ratepayers—and apparently DESC itself—the Commission should not permit
9 any TOU tariff to proceed until at least one-full year of 8760 data is readily available for
10 industry and ratepayers. Without this data, Alder could not effectively model/project
11 anticipated ROI and payback period under the C&I tariff.

12 **B. Alternative Solar Options**

13 DESC's proposed tariffs punish customer-generators seeking to accomplish
14 renewable energy goals, which are financially better off enrolling in in the utility's 'Offset
15 Only' option, or alternatively, the utility's 'Offset/Sell' option. See Exhibit DRZ-2. These
16 options allow full value for consumed DG and zero or avoided cost value, respectively, for
17 anything exported, without subscription fees. Nonresidential customers currently have a
18 program choice to offset/sell at the DESC's PR1 and PR2 (avoided cost) rate. This program
19 does not have a subscription fee and is not the NEM 3.0 program that is intended to be
20 replaced by DESC's proposed tariff. It is critical that this option remain open as it is
21 essentially DESC's current proposed tariff without the fixed fees.

22 **C. Storage and Grid Resilience**

23 Hourly netting discourages integration of battery storage, despite the proposed time of
24 use ("TOU") rate structure, and the subscription fee will encourage customers to opt-out of

1 NEM programs in favor of remaining on an all energy rate with a BTM system that never
2 exports to the grid. On the other hand, nonresidential customers are incentivized to install PV
3 plus storage systems on a TOU rate with annual or even monthly netting. These systems can
4 store generation during the off-peak midday hours and drain the batteries during the generally
5 dark, on-peak hours. Customer-stored energy can be consumed onsite or released to the grid
6 so that the utility accesses critical on-peak energy and the customer receives a bill credit at the
7 on-peak rate.

8 Hourly or instantaneous netting, as proposed by DESC, discourages the purchasing of
9 expensive battery storage because any exported energy, even during peak hours, will only
10 receive an avoided cost value. For many nonresidential customers who do not have high loads
11 during on-peak hours, the minimal amount of stored energy they could consume behind the
12 meter during on-peak times does not justify the added cost and complexity of a PV plus storage
13 system. It is widely recognized that utilities and ratepayers should strive to achieve a resilient
14 and smart distribution grid that incorporates more renewable energy with onsite storage.
15 DESC's C&I Tariff discourages nonresidential customer-generation and disrupts and
16 opportunity for DESC to achieve grid reliability.

17 The C&I Tariff further discourages nonresidential customers' one-hundred percent
18 renewable goals, battery storage, and micro-grids. If a nonresidential customer installed a PV
19 plus storage system that powered one-hundred percent of its energy requirements, while
20 remaining connected to the grid, the proposed subscription fee, alone, would discourage them
21 from enrolling in the tariff. If a customer powers its facilities solely from the energy generated
22 by the PV system and stored by the batteries, and maintains their utility meter and grid
23 connection for resiliency, they would have no energy charges each month but potentially pay
24 thousands of dollars in subscription fees that are scaled by PV system size and not by grid
25 utilization or grid capacity requirements.

1 Currently, if a nonresidential customer strives to achieve a goal of being powered by
2 one-hundred percent clean renewable energy, they may be able to achieve their target with a
3 NEM PV system that offsets all their energy load during the year, and annual netting allows
4 them to achieve that goal in an economically viable way. NEM encourages customers to
5 purchase and install renewable energy systems for their benefit and the environment's, working
6 with the grid, using its energy when needed and using power from the sun when available.

7 **Q: DOES THAT CONCLUDE YOUR TESTIMONY?**

8 **A:** Yes.

9 TPGL 10938984v5
10 _____

January 20, 2021

Dominion Energy Seeks Bids for Renewable Energy Certificates

RICHMOND, Va.— Dominion Energy Virginia has issued a request for proposals (RFP) for unbundled Renewable Energy Certificates (RECs) generated from facilities sized 1 megawatt or less to help meet clean energy goals under the renewable portfolio standard (RPS) as defined in the Virginia Clean Economy Act (VCEA).

The legislation passed by the General Assembly and signed by Gov. Ralph Northam in 2020 sets Virginia on a path to 100% clean energy and aligns with Dominion Energy's net zero goals. The mandatory RPS sets annual percentage goals for an increasing percentage of Dominion Energy's electricity sales to come from clean resources. In 2021, the Company will retire RECs equivalent to 14% of non-nuclear electricity sales to retail customers. By 2045 this percentage will increase to 100%.

The RFP is soliciting bids for RECs from solar, wind, or anaerobic digestion resources for compliance with the RPS. Eligible facilities must be located in the Commonwealth; must be no larger than one megawatt in size; and not have more than three megawatts at any single location or at contiguous locations owned by the same entity or affiliated entities. The Company anticipates that most proposals will submit RECs that come from existing facilities; however, prospective bidders may submit proposals to sell RECs generated through the end of 2023 which could come from existing facilities or new facilities.

The RFP outlines the proposal requirements, including the purchase and sales agreement terms, as well as the evaluation criteria.

Notices of Intent to Bid and Confidentiality Agreements are due no later than 3:00 PM EST on February 22, 2021 with Purchase and Sale Proposal submittals due no later than 3:00 PM EST March 22, 2021.

Potential bidders seeking more information on the competitive bidding process and the RFP submittal documents should visit

<http://www.dominionenergy.com/2021DistributedEnergyResourceRFP>. Customers and developers with questions on the RFP or who are interested in learning more about the company's renewable energy expansion plans may contact us via email:

2020.DER.REC.RFP@dominionenergy.com

Dominion Energy is committed to achieving net zero carbon and methane emissions and providing a cleaner energy future for the customers and the communities it serves.

This RFP will help the company continue to meet those goals while supporting the development of renewable energy resources in the Commonwealth.

Dominion Energy is transforming how the company serves customers and communities for the greater good. The details are outlined in the company's newly released Sustainability and Corporate Responsibility Report, which can be accessed online at sustainability.dominionenergy.com.

About Dominion Energy

More than [7 million customers in 16 states](#) energize their homes and businesses with electricity or natural gas from Dominion Energy (NYSE: [D](#)), headquartered in Richmond, Va. The company is [committed to sustainable, reliable, affordable and safe energy](#) and to achieving net zero carbon dioxide and methane emissions from its power generation and gas infrastructure operations by 2050. Please visit DominionEnergy.com to learn more.

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Media contacts:

Samantha Moore, 804-771-6115, samantha.q.moore@dominionenergy.com

Solar Energy Non-Residential Program Application



This form must accompany the appropriate application documents to interconnect for service. By submitting this application, customer acknowledges that customer is obligated to comply with Dominion Energy South Carolina, Inc.'s tariff, including its General Terms and Conditions for electric service, currently on file with the Public Service Commission of South Carolina ("Commission") and to comply with the Commission's rules and regulations governing electric service. All fields must be completed in order for this application to be reviewed.

Customer hereby gives notice of intent to Dominion Energy South Carolina to operate an interconnected renewable energy generating facility pursuant to the applicable Interconnection Standard. Customer must receive approval from Dominion Energy South Carolina to participate in the customer's program choice below prior to interconnecting to our system.

1. CUSTOMER INFORMATION

Customer/Business Name: _____ Account #: _____

Service Address: _____ City: _____ State: _____ Zip Code: _____

Customer/Authorized Customer Representative: _____

Telephone Number: _____ Email Address: _____

2. PROGRAM CHOICE (CUSTOMER MAY ONLY ELECT ONE)

☐ Net Energy Metering 3.0 ☐ Offset/Sell (PR1) ☐ Buy All/Sell All (PR1) ☐ Buy All/Sell All (PR2) ☐ Offset Only

3. SOLAR PHOTOVOLTAIC (PV) SYSTEM

Proposed System Size _____ (AC) _____ (DC)

☐ I will own my PV System ☐ I will lease my PV System (if leasing, please complete the Lessor's information below)

Lessor (Company Name): _____

Mail Address: _____ City: _____ State: _____ Zip Code: _____

Authorized Representative: _____

ORS Certification No. _____ Email Address: _____

4. THIRD PARTY INSTALLER

Third Party Installer (Legal Name): _____ Account #: _____

Mail Address: _____ City: _____ State: _____ Zip Code: _____

Authorized Installer Representative: _____

Telephone Number: _____ Email Address: _____

Due to privacy policies, Dominion Energy South Carolina may not discuss any customer account information (including, but not limited to, billing information, application to interconnect, updates on the status of the application to interconnect, approximate bi-directional meter installation date (if applicable), or electrical release) with a third party unless the Dominion Energy South Carolina account holder has authorized Dominion Energy South Carolina to discuss such matters with a third party.

I, the below customer/authorized customer representative:

- ☐ Do hereby authorize Dominion Energy South Carolina to discuss my application to interconnect and any related information concerning my account with the above-named Third Party Installer.
- ☐ Do not authorize Dominion Energy South Carolina to discuss my application to interconnect and any related information concerning my account with the above-named Third Party Installer.

5. APPLICATION SUBMITTAL

I, the below customer/authorized customer representative, hereby request that Dominion Energy South Carolina, Inc. review my application for the Solar Energy Non-Residential Program indicated above based on the foregoing.

Print Name _____

Exhibit DRZ-2 | p. 1

Alder Energy Systems, LLC

Signature of Customer/Authorized Customer Representative

Submittal Date